

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch  
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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-002776**Date Inspected:** 02-Jun-2008**Project Name:** SAS Superstructure**OSM Arrival Time:** 2300**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 800**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Xu Le Feng**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** Tower**Summary of Items Observed:**

The Caltrans Quality Assurance (QA) Inspector Charlie Franco was present at the time requested to randomly observe welding and associated operations being performed for the Tower and Orthotropic Box Girders (OBG).

**New Tower Shop Bay 1:**

The QA Inspector randomly observed ZPMC welder Chen Hongxia ID Number 040460, utilizing the Submerged Arc Welding (SAW) Process in the 1G Position (Flat Groove) with ZPMC Weld Procedure Specification (WPS) WPS-B-T-2221-B-U3c-S, to weld the fill pass in Weld Joint (WJ) SSD1-SA179B/E-11B(CJP) on Tower Skin Plate C Sub-Assembly SA179(S). The QA Inspector randomly observed ZPMC CWI Xu Le Feng monitoring weld parameters. The QA Inspector also randomly monitored weld parameters and recorded them as follows: 660 amps, 33.2 volts with a travel speed of 593 millimeters (mm) per minute. The weld parameters appeared to comply with contract requirements. The attached photograph provides additional detail.

The QA Inspector randomly observed ZPMC personnel cutting off restraints and removing Tower Skin Plate C Sub-Assembly SA179(S) from the welding table to the flipping jig with an overhead crane. The QA Inspector then randomly observed ZPMC personnel utilizing the flipping jig to flip Tower Skin Plate C Sub-Assembly SA179(S) to the A side and then return to the welding table with an overhead crane, to allow for back gouging of WJ SSD1-SA179A/E-11B from the A side. The attached photographs provide additional detail.

The QA Inspector randomly observed a ZPMC Carbon Air Arc operator utilizing the Carbon Air Arc Process to back gouge WJ SSD1-SA179A/E-11B of Tower Skin Plate C Sub-Assembly SA179(S), from the A side. The

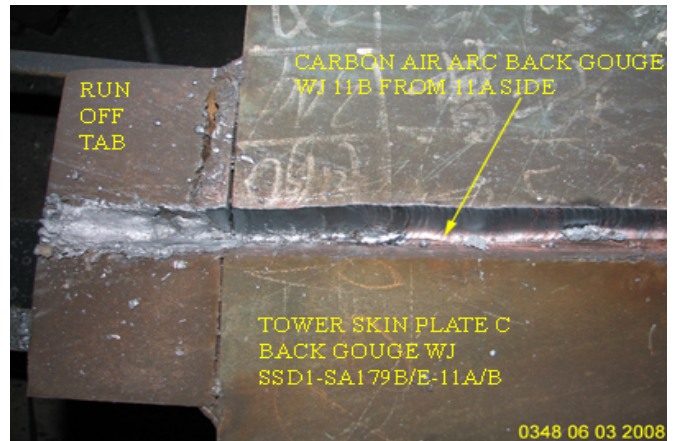
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attached photograph provides additional detail.

The QA Inspector randomly observed ZPMC welder Chen Hongxia ID Number 040460, utilizing the SAW Process in the 1G Position (Flat Groove) with ZPMC WPS WPS-B-T-2221-B-U3c-S, to weld the fill pass in WJ SSD1-SA40A/E-18B(CJP) Tower Skin Plate D Sub-Assembly SA40(S). The QA Inspector randomly observed ZPMC CWI Xu Le Feng monitoring weld parameters. The QA Inspector also randomly monitored weld parameters and recorded them as follows: 676 amps, 33 volts with a travel speed of 560 mm per minute. The weld parameters appeared to comply with contract requirements. The attached photograph provides additional detail.

The QA Inspector randomly observed ZPMC welder Chen Hongxia ID Number 040460, utilizing the SAW Process in the 1G Position (Flat Groove) with ZPMC WPS WPS-B-T-2221-B-U3c-S, to weld the cover pass in WJ SSD1-SA40A/E-18B(CJP). The QA Inspector randomly observed ZPMC CWI Xu Le Feng monitoring weld parameters. The QA Inspector also randomly monitored weld parameters and recorded them as follows: 675 amps, 33 volts with a travel speed of 574 mm per minute. The weld parameters appeared to comply with contract requirements. The attached photograph provides additional detail.



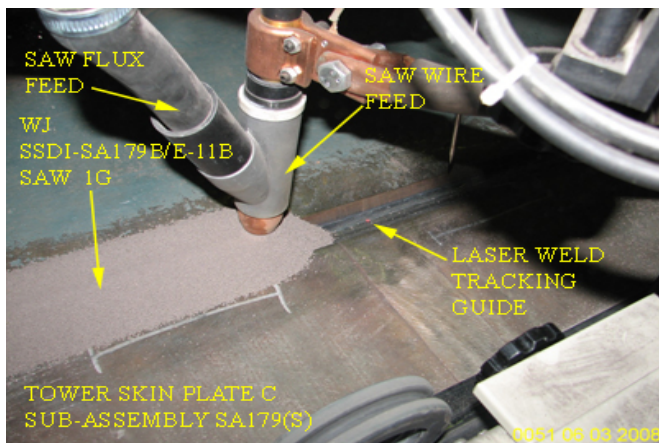


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## Summary of Conversations:

There were no relevant conversations.

## Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Mazen Wahbeh, (818) 292-0659, who represents the Office of Structural Materials for your project.

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<b>Inspected By:</b>	Franco,Charlie	Quality Assurance Inspector
<b>Reviewed By:</b>	Cochran,Jim	QA Reviewer

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